

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 73, 75-82 and 84-90 are currently being prosecuted. The Examiner is respectfully requested to reconsider her rejections in view of the amendments and remarks as set forth below.

Entry of Amendment

Since the present Amendment is being submitted with a Request for Continued Examination, Applicants submit that entry of this Amendment and full consideration thereof is appropriate.

Rejection Under 35 USC 102

Claims 73, 75-82 and 90 stand rejected under 35 USC 102 as being anticipated by Bussard (U.S. Patent 5,281,499). Claims 73, 75-82 and 90 also stand rejected under 35 USC 102 as being anticipated by Takeuchi et al. (U.S. Patent 4,856,857). These rejections are respectfully traversed.

Before considering the reference, Applicants note that independent claim 73, which is the only remaining independent claim, has now been amended to better describe the invention. First, the section in the final paragraph relating to the color layer has been moved to the beginning of the claim to better specify the arrangement of the substrate, color layer and first layer. This is merely a rearrangement of the sections of the claim so that the arrangement of layers is more clear. Applicants have also revised the remaining part of the final paragraph to define the step of forming a sidewall part of the metal article from the metal substrate. This differs from the previous language which discusses the metal substrate as being an integral part of the container. Applicants wish to point out that neither of the references cited by the Examiner describe the

forming of a sidewall part of a metal article from the metal substrate. Applicants submit that claim 73 is allowable since neither reference teaches this feature. Accordingly, Applicants submit that claim 73 is allowable over both of these references.

In addition, Applicants submit that the Takeuchi reference does not show a method for replicating a surface relief where a holding metal substrate on which a color layer and a non-metallic layer having a diffracting optical element is provided. This in addition to the fact that the reference does not show the formation of the sidewall part of a metal article. Accordingly, Applicants submit that claim 73 is further allowable.

Claims 75-82 and 84-90 depend from claim 73 and as such are also considered to be allowable. In addition, each of these claims recite other features that make these claims additionally allowable.

Rejection Under 35 USC 103

Claims 84-89 stand rejected under 35 USC 103 as being obvious over Bussard. Claims 84-89 also stand rejected under 35 USC 103 as being obvious over Takeuchi. These rejections are respectfully traversed.

Claims 84-90 relate to the thickness of the first layer of the non-metallic material and the replication of the surface relief using either a rolling process or a stamping process. Applicants submit that even if these features are obvious as suggested by the Examiner, that these claims remain allowable based on their dependency from allowable claim 73.

Furthermore, Applicants submit that the teachings of the present invention differ from those of the references. The teachings of Takeuchi are generally split up in four sections (embodiments): (A) concerning a transparent-type hologram; (B) concerning a transparent-type

hologram transfer sheet; (C) concerning a transparent-type hologram sheet and (D) concerning a transparent-type hologram article.

In short, section (A) relates to the actual construction of the transparent-type hologram, (B) relates to the construction of a transfer sheet for transferring the hologram onto another article, (C) relates to the construction of a hologram sheet for adhesion of the transparent-type hologram on the surface of another article and (D) relates to an article applied with transparent-type hologram.

Sections (B) and (C) of Takeuchi describe how the transparent-type hologram of section (A) may be fitted with a layer of adhesive and a releasable sheet material ("transfer medium") for preventing the adhesive from sticking to things before the sheet is ready for application onto the surface of another material. See in particular Col. 2, lines 23-26; Col. 15, lines 33-47 and Col. 16, lines 20-24 of Takeuchi.

When reading these sections it is clear to the reader that the intention of Takeuchi is to provide a hologram that can be easily transferred from a "transfer medium" (Col. 16, line 22) to a large variety of articles. This must be considered a way of labeling articles with holograms, a technique well known in the art and one that the method of the present invention is intended to improve, cf. page 1, lines 12-13 and page 2, lines 20-21. In the Applicants' opinion, Takeuchi teaches away from any conceivable method for providing an article with an inherent replicated surface relief applicable for high-speed production lines for manufacturing, e.g., food container (cf. the application, page 2, lines 27-28). Also, the use of the products taught by Takeuchi for applying a hologram to an article would at the least require an extra step of transferring the hologram to an article from the hologram transfer sheet either automatically or manually.

Furthermore, with the claimed method according to the invention the need for replicating the surface relief by embossing according to known techniques, i.e., at increased temperature and elevated pressure, is avoided (cf. the application, page 2, lines 23-27). In section (A) of Takeuchi, it is described how the transparent-type hologram layer can be obtained according to a

method as known in the art such as providing a hologram original plate on a resin sheet and then let these parts be pressure contacted by means of heating rolls in order to duplicate the pattern on the hologram original plate onto the resin sheet surface (see Takeuchi, Col. 6, lines 53-64). Again, Takeuchi teaches away from the method according to the claimed invention.

Bussard teaches an interface assembly comprising a substrate such as a metal substrate, and a transparent polymer film having a holographic or a diffraction grating image embossed thereon adhered to the substrate via an adhesive silk screen printing ink, said ink underlying the film and contacting sizing on the underside of said film. The interface assembly is a modification of commercially available holographic materials to make them more suitable for use as application to fabrics and other materials.

It is not indicated in Bussard that the metal substrate of the interface assembly is suitable for use as a sidewall part of a metal article. First of all, in order to provide the interface assembly of Bussard, the hologram is embossed on a transparent polymer film which in turn is adhered to the metal substrate by an adhesive silk screen printing ink. Thus, in order to provide the actual claimed interface assembly, a separate embossing of the diffraction grating image onto the polymer film followed by the adhesion of the film to the substrate has to be performed. Subsequent to that, the interface assembly then has to be applied to an article (such as a t-shirt or a tote bag) by means of heat and pressure (cf. Bussard, claim 8). Therefore, in order to provide a hologram on an article according to the teachings of Bussard, one first has to assemble the interface assembly and then attached it to the article.

It is evident that Bussard is not related to the same field of technology as the presently claimed invention. Assuring that an interface assembly comprising a holographic appearance can be applied to articles, in particular fabrics, and to improve the resistance of the interface assembly against delamination from the article is not related to a method for replicating a surface relief in a non-metallic layer placed on a holding metal substrate which is formed into a sidewall part of a metal article.

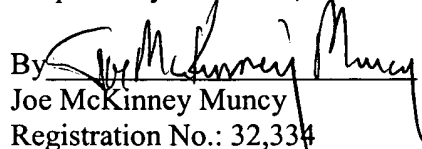
Neither Takeuchi nor Bussard describe a method (in fact, the only method/process described is in Bussard wherein a holographic layer is heat-transferred onto a fabric substrate, otherwise Bussard and Takeuchi apply to products/articles) wherein a hologram on the surface of an article is provided in the course of making the article. In both cases, the hologram or the holographic effect on an article is achieved by a necessary subsequent treatment step of the layer/sheet carrying the hologram, for example by adhesion (labeling) or transferal by other means such as with the aid of heat and pressure. Since the claimed method offers to provide a hologram or holographic effect on a metal article already prior to the forming of the article the metal substrate can be made with a much more uniform design and the method is therefore particularly applicable in connection with high-speed production lines for manufacturing of, e.g., food containers which is then "already" protected against counterfeiting (cf. application, page 2, lines 8-11 and lines 26-28; page 5, lines 8-10 and page 8, lines 5-8).

Conclusion

In view of the above remarks, Applicants submit that the claims clearly distinguish over the patents relied on by the Examiner. In view of this, reconsideration of the rejection and allowance of all of the claims are respectfully requested.

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Respectfully submitted,

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